

Gaining Proficiency in World-Class BOM Management



May 17-18, 2012

Instructor:

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Session Outline



During this proficiency training course:

Attendees will be given guidance and instruction intended to aid their organization in the strategic implementation of a proactive Bill Of Material (BOM) Management approach designed to identify, analyze and resolve current and impending part availability risks associated with obsolescence.

2012 National Defense Authorization Act



One Hundred Twelfth Congress of the United States of America

AT THE FIRST SESSION

Begun and held at the City of Washington on Wednesday, the fifth day of January, two thousand and eleven

An Act

To authorize appropriations for fiscal year 2012 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "National Defense Authorization Act for Fiscal Year 2012".

Section 818: Detection and Avoidance of Counterfeit Electronic Parts

- Requires...processes to abolish counterfeit parts
- Requires...the use of trusted suppliers
- Requires...the design, operation, and maintenance of systems to detect and avoid counterfeit electronic parts
- Requires...standards and processes for identifying such trusted suppliers comply with established industry standards

Industry Standards





AEROSPACE STANDARD

SAE A\$5553 Issued 2009-04

Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition

RATIONALE

This standard was created in response to a significant and increasing volume of counterfeit electronic parts entering the aerospace supply chain, posing significant performance, reliability, and safety risks.

This standard was created to provide uniform requirements, practices and methods to mitigate the risks of receiving and installing counterfeit electronic parts.

FOREWORD

To assure customer satisfaction, serospace industry organizations must produce, and continually improve, safe, reliable products that meet or exceed customer and regulatory authority requirements. The globalization of the serospace industry and the resulting diversity of regional/restoral requirements and expectations has complicated this objective. End-product organizations face the challenge of assuring the quality and integration of product purchased from suppliers throughout the world and at all levels within the supply chain. Assurance suppliers and processors face the challenge of delivering product to multiple customers having varying quality expectations and requirements.

This document standardizes requirements, practices, and methods related to: parts management, supplier management, procurement, inspection, fest/evaluation, and response strategies when suspect or confirmed counterfeit parts are discovered.

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SAE values your input. To provide feedback on this Technical Report, please visit http://www.asa.cag/decinical/standards/AS6663

SAE AS5553

- •Obsolescence can increase the risk of acquiring counterfeit electronic parts. To reduce the likelihood of purchasing counterfeit parts, electronic equipment manufacturers should proactively manage the life cycle of their products through the use of a Diminishing Manufacturing Sources and Material Shortages (DMSMS) management plan.
- •The processes shall maximize availability of authentic, originally designed and/or qualified parts throughout the product's life cycle, including management of parts obsolescence.

Meet Regulatory and Industry Specified Compliancy



IHS can help by providing the required tools and content for:

 Effective BOM Management which critical in mitigating costs and risks associated with counterfeit and obsolete components and proactive identification of current and impending part availability changes.



IHS BOM Manager

With the IHS BOM Manager tool and Electronic Components Database, customers can:

- Identify obsolescence and counterfeit risks as early as possible
- Identify alternate parts, sources and aftermarket manufacturers
- Manage and evaluate suppliers in a Approved Manufacturer List (AML)
- Receive part status, counterfeit, PCN/EOL, GIDEP notices, and price/availability updates

IHS Electronic Components Database



The Electronics Database contains component information on over 300 million electronic components, from more than 1,500 manufacturers representing over 450 part categories:

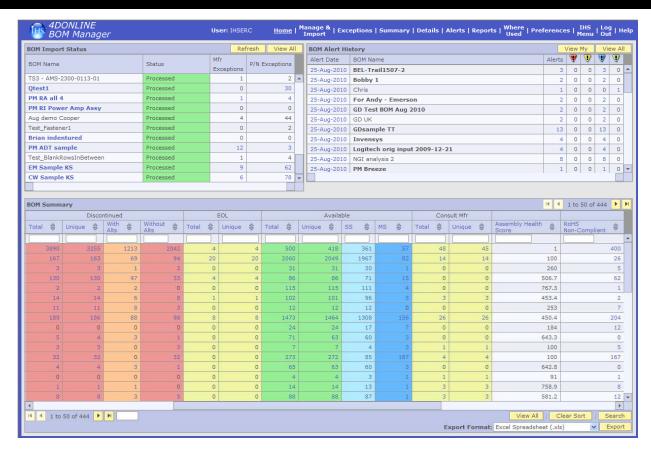
- Batteries
- Connectors
- Crystals / Oscillators
- Cylindricals
- Electro-Mechanical Components
- Fans & Blowers
- Fasteners & Hardware
- Fiber Optic Connectors
- Fiber Optic Devices

- Fuses & Circuit Protection
- Heat Sinks
- Sensors
- Passive Devices
- Power Supplies
- Relays
- •RF Microwave Devices
- Semiconductors
- Transformers

BOM Manager – Home Page



- Dashboard
- AML
- BOM Details
- Where Used
- Reports
- Email Notification
- ERAI Alerts



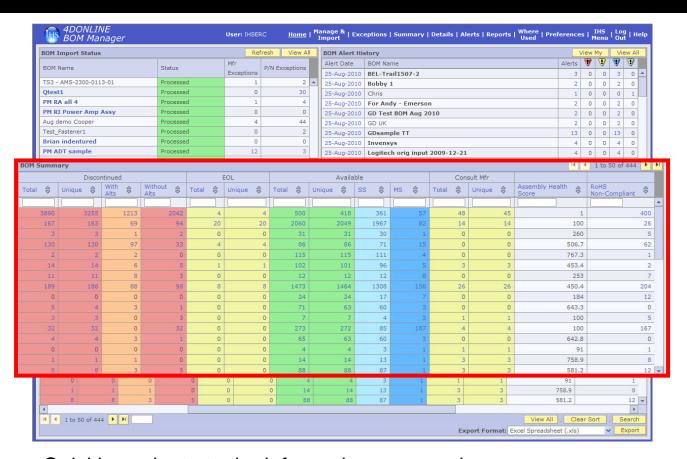
Quickly navigate to the information you need:

- Identify parts of concern
- Monitor alerted parts

BOM Manager – Home Page



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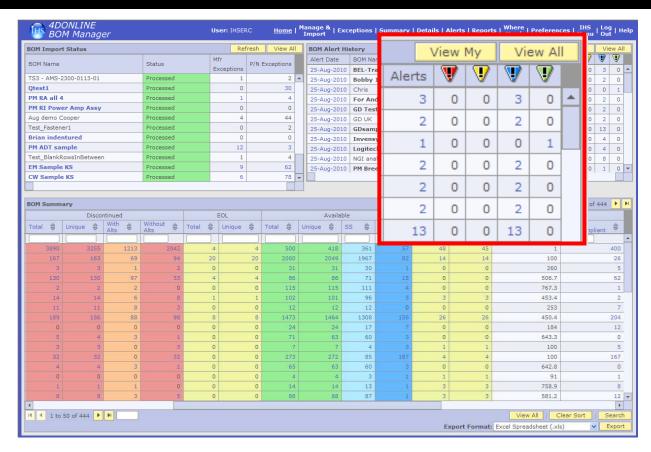
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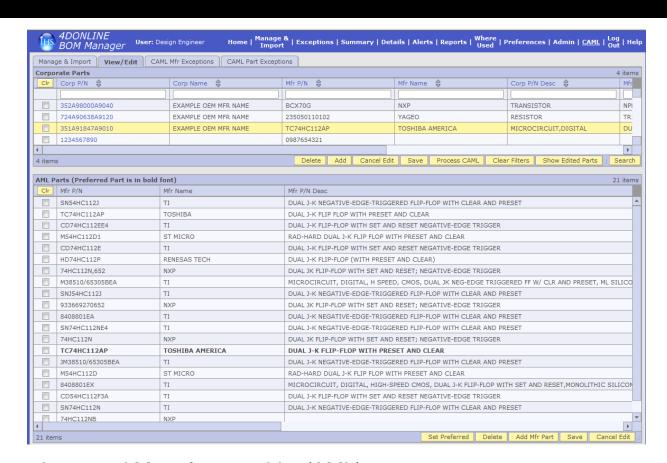
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BOM Manager – AML Page



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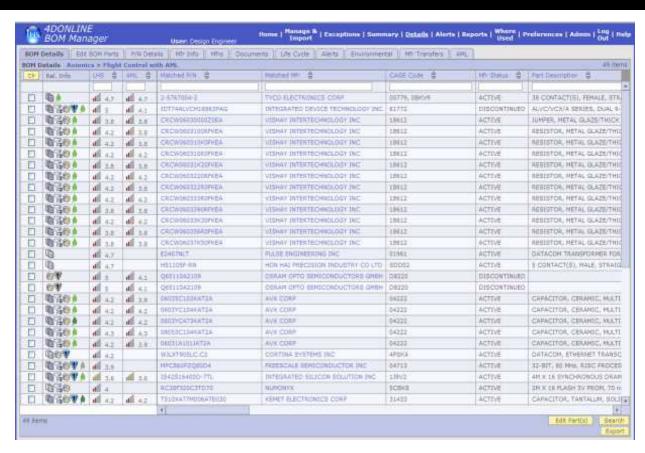


Approved Manufacturer List (AML):

 Create and manage your corporate AVL – Reduce part number and supplier redundancy



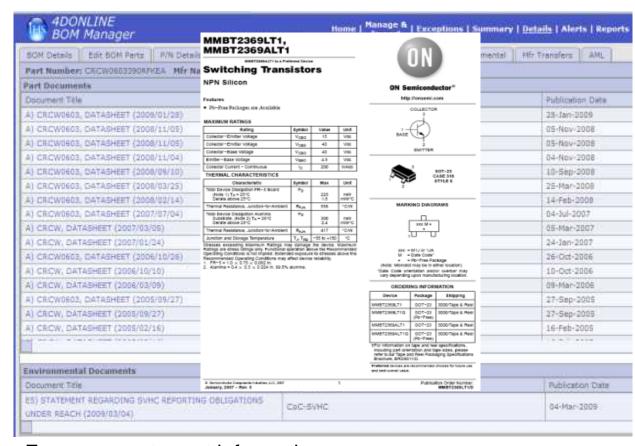
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- Datasheets
- Lifecycle
- Alerts / Notices
- Technical attributes
- Alternates



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BOM Details Edit BOM Parts P/N	Chetalis Mfr Info Mfrs Documents Life Cycle
Part Number: 511741/178995PW Mile I	Name: TI PS: A
Category	Microprocessor (CrOther
Manufacturer Part Description	3.3V 105 ADD SCN PRT MTDRP-ADD TRNS
Manufacturer Package Description	GREEN, PLASTIC, TSSOP-24
CAGE Code	01295
RoHS Compliant	YES
RoHS Exemption(s)	
SIVINC Presence	NO-SEE ENV DOC
POSL Presence	NO-SEE ENV DOC
China RohS Compliant	YES
Load Free	YES
Generic Number	74LVT8996
Histoprocessor Circuit Type	MICROPROCESSOR CIRCUIT
Qualification Status	COMMERCIAL
Temperature Grade	INDUSTRIAL
Supply Voltage Norn (Vaup) (V)	3
Supply Voltage-Min (Veup) (V)	2.7
Supply Voltage Hax (Vaup) (V)	3.6
Technology	BICHOS
Number of Functions	(\$
Package Code	TSSOF
JESO-30 Cade	R-PDSO-G24
Package Shape	RECTANGULAR
Package Sody Material	PLASTIC/EPOXY
Terminal Position	DUAL
Package Style	SHALL OUTLINE, THIN PROFILE, SHRINK PITCH
Terminal Form	GULL WING
Number of Terminals	24
Surface Hount	VES
Length (mm)	7.8
Width (mm)	4.4
Seated Height-Max (mm)	1.2
Terminal Pach (mm)	0.65

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- Technical Attributes
- Alternates



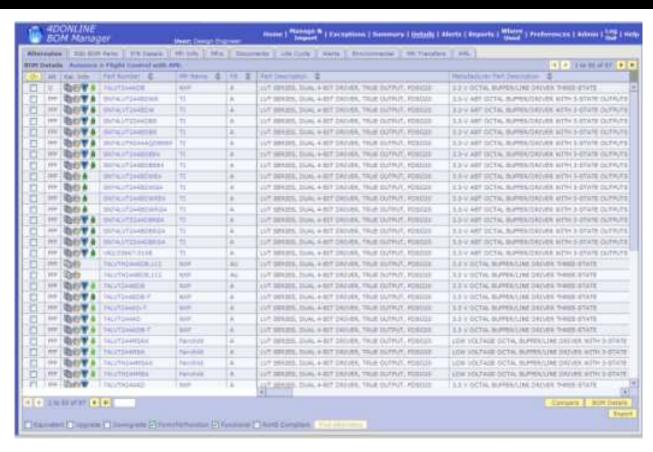
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User: Design Engineer Home Manage Impor	
Mfr Info Mfrs Documents Life Cycle	
Part Number: NE570D Mfr Name: On Semi PS: E	
NE570D	
On Semi	
PHASE-OUT	
4.9	
< 1	
0.4	
MANUFACTURER	
LTB WHILE SUPPLY LAST	

- Datasheets
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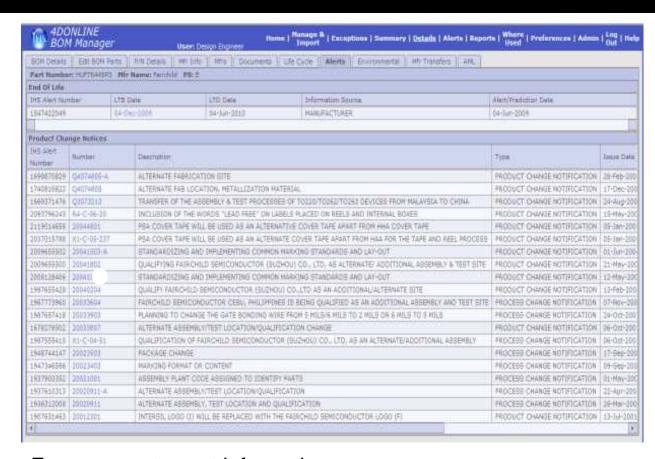
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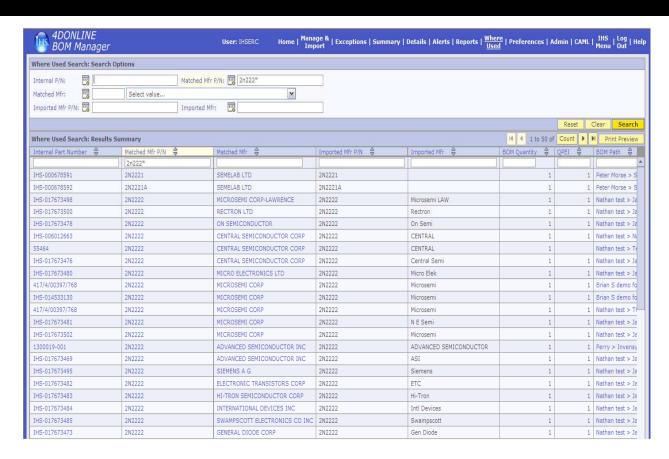


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BOM Manager – Where Used



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Identify other lists that are impacted by the same event:

- Search across lists using a variety of methods
- Identify duplicate parts

BOM Manager – Reports Page



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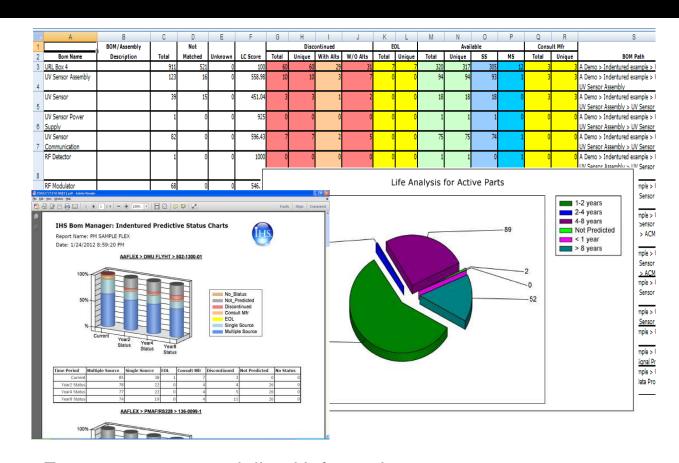
Easy access to specialized information:

- Predicted Status
- Health Analysis

BOM Manager – Reports Page



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Easy access to specialized information:

- Predicted Status
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BOM Manager – Notifications



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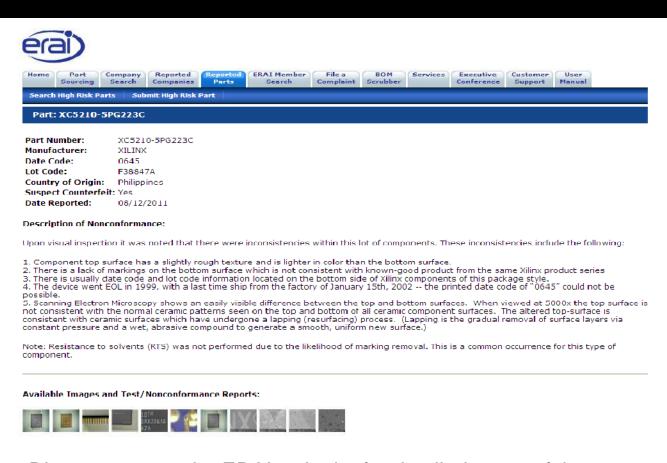
Automatically Receive Email Notifications:

- Part availability changes, suspect counterfeit
- PCN and EOLs

BOM Manager – ERAI Alerts



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Direct access to the ERAI web site for detailed counterfeit part activity

Next Steps



Part Obsolescence Management:

- 1. Gain access to a BOM Management tool to analyze parts and designs for potential risk and proactively monitor changes.
- 2. Improve your supply chain by identifying approved alternate sources and aftermarket manufacturers.
- 3. Apply Life Cycle forecasters to component selection decisions.
- 4. Utilize specialized reporting capabilities to help make informed decisions.
- 5. Evaluate parts for known counterfeit activity and suspect suppliers.

